WHAT IS CLAIMED IS:

1. A method for detecting cervical cancer in a human, comprising:

detecting the presence of a cervical cancer-associated protein in a tissue or body fluid sample of the human thereby to indicate the presence of a cervical cancer, wherein the cervical cancer-associated protein is characterized as having a molecular weight of from about 44,900 Daltons to about 69,400 Daltons as determined by standard polyacrylamide gel electrophoresis techniques and an isoelectric point of from about 5.1 to about 6.6 as determined by standard isoelectric focusing techniques, and wherein the protein is further characterized as being a non-chromatin protein which is detectable at a higher level in a human cervical cancer cell than in a normal human cervical cell, as determined by two-dimensional gel electrophoresis.

2. The method of claim 1, wherein said cervical cancer-associated protein is a nuclear matrix protein.

3. The method of claim 1, wherein said detecting step comprises detecting a plurality of cervical cancer-associated proteins.

4. The method of claim 1, wherein said cervical cancer-associated protein has a molecular weight of about 69,400 Daltons and an isoelectric point of about 5.8.

5. The method of claim 1, wherein said cervical cancer-associated protein has a molecular weight of about 53,800 Daltons and an isoelectric point of about 5.5.

6. The method of claim 1, wherein said cervical cancer-associated protein has a molecular weight of about 47,900 Daltons and an isoelectric point of about 5.6.

7. The method of claim 6, wherein a portion of said cervical cancer-associated protein comprises a continuous amino acid sequence selected from the group consisting of: SEQ ID NO.: 1; SEQ ID NO.: 2; SEQ ID NO.: 3; SEQ ID NO.: 4;

SEQ ID NO.: 5; SEQ ID NO.: 6; SEQ ID NO.: 7; SEQ ID NO.: 8; and SEQ ID NO.: 9.

8. The method of claim 7, wherein said cervical cancer-associated protein comprises an amino acid sequence shown in SEQ ID NO.: 10.

9. The method of claim 6, wherein a portion of said cervical cancer-associated protein comprises a continuous amino acid sequence selected from the group consisting of: SEQ ID NO.: 11; SEQ ID NO.: 12; SEQ ID NO.: 13; SEQ ID NO.: 14; SEQ ID NO.: 15; SEQ ID NO.: 16; and SEQ ID NO.: 17.

10. The method of claim 9, wherein said cervical cancer-associated protein comprises an amino acid sequence shown in SEQ ID NO.: 18.

11. The method of claim 6, wherein a portion of said cervical cancer-associated protein comprises a continuous amino acid sequence selected from the group consisting of: SEQ ID NO.: 19; SEQ ID NO.: 20; SEQ ID NO.: 21; SEQ ID NO.: 22; SEQ ID NO.: 23; SEQ ID NO.: 24; and SEQ ID NO.: 25.

12. The method of claim 11, wherein said cervical cancer-associated protein comprises an amino acid sequence shown in SEQ ID NO.: 26.

13. The method of claim 1, wherein said cervical cancer-associated protein has a molecular weight of about 46,000 Daltons and an isoelectric point of about 5.1.

14. The method of claim 1, wherein said cervical cancer-associated protein has a molecular weight of about 44,900 Daltons and an isoelectric point of about 6.6.

15. The method of claim 14, wherein a portion of said cervical cancer-associated protein comprises a continuous amino acid sequence selected from the group consisting of: SEQ ID NO.: 27; SEQ ID NO.: 28; SEQ ID NO.: 29; SEQ ID NO.: 30; SEQ ID NO.: 31; SEQ ID NO.: 32; and SEQ ID NO.: 33.

16. The method of claim 15, wherein said cervical cancer-associated protein comprises an amino acid sequence shown in SEQ ID NO.: 34.

17. The method of claim 14, wherein a portion of said cervical cancer-associated protein comprises a continuous amino acid sequence selected from the group consisting of: SEQ ID NO.: 35; SEQ ID NO.: 36; SEQ ID NO.: 37; SEQ ID NO.: 38; SEQ ID NO.: 39; SEQ ID NO.: 40; SEQ ID NO.: 41; SEQ ID NO.: 42; SEQ ID NO.: 43; SEQ ID NO.: 44; and SEQ ID NO.: 45.

18. The method of claim 17, wherein said cervical cancer-associated protein comprises an amino acid sequence shown in SEQ ID NO.: 46.

19. The method of claim 1, wherein said method further comprises the steps of:

reacting the sample with a labeled binding moiety capable of specifically binding the cervical cancer-associated protein to form a labeled complex of the binding moiety and the cervical cancer-associated protein; and

detecting the labeled complex thereby to indicate the presence of the cervical cancer.

20. The method of claim 19, wherein the labeled binding moiety comprises a labeled antibody capable of binding an epitope on said cervical cancer-associated protein.

21. The method of claim 20, wherein the antibody is a monoclonal antibody.

22. The method of claim 1, wherein said method, prior to said detecting step, further comprises the step of isolating the cervical cancer-associated proteins from the sample; and

wherein said detecting step comprises,

separating the proteins by two-dimensional gel electrophoresis thereby to produce a two-dimensional gel electrophoresis pattern; and

comparing the gel electrophoresis pattern with a standard.

23. The method of claim 22, ~~wherein the standard is obtained~~ from a data base of ~~electrophoresis patterns.~~

24. A method for detecting cervical cancer in a human, comprising:

detecting the presence of a nucleic acid molecule in a tissue or body fluid sample of the human thereby to indicate the presence of a cervical carcinoma in the human,

wherein the nucleic acid molecule is selected from the group consisting of:

a nucleic acid molecule comprising a sequence capable of recognizing and being specifically bound by a cervical cancer-associated protein; and

a nucleic acid molecule comprising a sequence encoding a cervical cancer-associated protein,

wherein said cervical cancer-associated protein is characterized as being selected from the group consisting of:

a protein having a molecular weight of about 69,400 Daltons and an isoelectric point of about 5.8;

a protein having a molecular weight of about 53,800 Daltons and an isoelectric point of about 5.5;

a protein having a molecular weight of about 47,900 Daltons and an isoelectric point of about 5.6;

a protein having a molecular weight of about 46,000 Daltons and an isoelectric point of about 5.1; and

a protein having a molecular weight of about 44,900 Daltons and an isoelectric point of about 6.6,

wherein the molecular weight is determined by standard polyacrylamide gel electrophoresis techniques and the isoelectric point is determined by standard isoelectric focusing techniques, and

wherein the cervical cancer-associated protein is further characterized as being a non-chromatin protein which is detectable at a higher level in a human cervical

cancer cell than in a normal human cervical cell, as determined by two-dimensional gel electrophoresis.

25. The method of claim 24, wherein said method comprises reacting the sample with a labeled hybridization probe capable of hybridizing specifically with at least a portion of the nucleic acid molecule.

26. The method of claim 24, wherein the nucleic acid molecule is capable of recognizing and being specifically bound by a protein associated with metastasized cervical cancer; and

wherein the presence of the nucleic acid molecule is detected thereby to indicate the presence of metastasized cervical cancer.

27. The method of claim 24, wherein the cervical cancer-associated protein is a nuclear matrix protein.

28. A kit for detecting the presence of cervical cancer or for evaluating the efficacy of a therapeutic treatment of a cervical cancer, the kit comprising in combination:

a receptacle for receiving a human tissue or body fluid sample from a mammal;

a binding moiety which binds specifically to an epitope on a cervical cancer-associated protein, said protein being characterized as having a molecular weight of from about 44,900 Daltons to about 69,400 Daltons as determined by standard polyacrylamide gel electrophoresis techniques and an isoelectric point of from about 5.1 to about 6.6 as determined by standard isoelectric focusing techniques, and wherein the protein is further characterized as being a non-chromatin protein which is detectable at a higher level in a human cervical cancer cell than in a normal human cervical cell, as determined by two-dimensional gel electrophoresis;

a means for detecting the binding of the binding moiety with the cervical

cancer-associated protein; and

a reference sample.

29. The kit of claim 28, wherein the binding moiety binds specifically to a cervical cancer-associated protein having a molecular weight of about 69,400 Daltons and an isoelectric point of about 5.8.

30. The kit of claim 28, wherein the binding moiety binds specifically to a cervical cancer-associated protein having a molecular weight of about 53,800 Daltons and an isoelectric point of about 5.5.

31. The kit of claim 28, wherein the binding moiety binds specifically to a cervical cancer-associated protein having a molecular weight of about 47,900 Daltons and an isoelectric point of about 5.6.

32. The kit of claim 28, wherein the binding moiety binds specifically to a cervical cancer-associated protein having a molecular weight of about 46,000 Daltons and an isoelectric point of about 5.1.

33. The kit of claim 28, wherein the binding moiety binds specifically to a cervical cancer-associated protein having a molecular weight of about 44,900 Daltons and an isoelectric point of about 6.6.

34. The kit of claim 28, wherein said reference sample is indicative of a normal cervical cell.

35. A method for treating cervical cancer, comprising the step of :

administering to a patient diagnosed as having cervical cancer, a therapeutically-effective amount of a compound which binds specifically to an epitope on a cervical cancer-associated protein thereby to inactivate said protein, said protein being characterized as having a molecular weight of from about 44,900 Daltons to about 69,400 Daltons as determined by standard polyacrylamide gel electrophoresis techniques and an isoelectric point of from about 5.1 to about 6.6 as determined by standard isoelectric

focusing techniques, and wherein the protein is further characterized as being a non-chromatin protein which is detectable at a higher level in a human cervical cancer cell than in a normal human cervical cell, as determined by two-dimensional gel electrophoresis.

36. The method of claim 35, wherein said compound is an antibody.

37. A method for treating cervical cancer, comprising the step of :

administering to a patient diagnosed as having cervical cancer, a therapeutically-effective amount of a compound which reduces the expression of a cervical cancer-associated protein thereby to reduce expression of said protein, said protein being characterized as having a molecular weight of from about 44,900 Daltons to about 69,400 Daltons as determined by standard polyacrylamide gel electrophoresis techniques and an isoelectric point of from about 5.1 to about 6.6 as determined by standard isoelectric focusing techniques, and wherein the protein is further characterized as being a non-chromatin protein which is detectable at a higher level in a human cervical cancer cell than in a normal human cervical cell, as determined by two-dimensional gel electrophoresis.

38. The method of claim 37, wherein said compound is a first nucleic acid sequence complementary to and capable of hybridizing to a second nucleic acid sequence encoding at least a portion of said protein.

add B2

Add C5